

3.A.3.9 One of the concerns when engineering the cabling between the interconnector equipment, the POT frame and SWBT's DSX-1/3 bays is cable distance and signal degradation. The following table provides a list of the intraoffice cabling distance limitations for DS1 and DS3 circuits.

TYPE OF CONNECTION	DISTANCE LIMIT
DSX-1	655 feet
inter DSX-1	85 feet
DSX-3	450 feet
inter DSX-3	20 feet

3.A.3.10 The DSX values refer to the distance limits for the connection between the DSX bay and the transmission equipment. The inter-DSX values refer to the distance limits between multiple DSX bays. Multiple DSX bays are usually used only when the quantity of connections gets large enough to justify the need for inter-DSX jumpers.

3.A.3.11 Signal specifications are usually made at the DSX level, meaning that the acceptability of the signal is determined by readings made at the DSX bay. The standard way of connecting to the DSX bay is to use artificial line build out at the transmission equipment to make the total effective distance to the DSX bay equal to the DSX distance limit. In this manner, every circuit appearance at the DSX bay is at the same signal strength. In cases where this distance limit cannot be met, intraoffice repeaters can be used to regenerate the signal to bring the signal strength to acceptable levels.

3.A.3.12 SWBT's Tariff FCC No. 73, Section 25, specifies that "regeneration of either DS1 or DS3 signal levels may be provided by the interconnector, or the Telephone Company on an Individual Case Basis (ICB)". The DSX distance limits apply, and in most instances the need for intraoffice repeaters will not be required.

3.A.3.13 Intraoffice repeaters will only be used in the standard design when the distance from the interconnector's equipment to SWBT DSX bays exceeds the DSX distance limit. Where intraoffice repeaters are required because of DSX distance, SWBT will provide the necessary regeneration to furnish DS1/DS3 signal levels.

3.A.3.14 Interconnectors whose equipment is within the DSX distance limits will receive signals with levels below the DSX values, but still within the acceptable range for intraoffice wiring. If SWBT is requested to provide regeneration by the interconnector, all costs to provide the regeneration will be billable (ICB) to the interconnector.

3.A.3.15 To provide the interconnector with 48V DC power, power cables will be installed from SWBT power plant to the 48V circuit breaker panel installed in the POT frame. The interconnector will obtain its DC power by cabling to the rear side of the circuit breaker panel (this will be discussed in more detail in Section 3.C, Power and Grounding).

3.A.3.16 The interconnector has four combinations of tariff elements to select from in providing a point of termination between their equipment in the partitioned space and SWBT's power and DS-1/DS-3 facilities. The combination of tariff elements selected by the interconnector will prescribe the material SWBT will be responsible for furnishing and having installed.

3.A.3.17 The interconnector will identify the selected combinations of tariff elements to be furnished and installed by SWBT on the submitted "Physical Collocation Application" form, Exhibit 3.A.3.2-1.

3.A.3.18 The four combinations of tariff elements the interconnector can select are as follows:

- SWBT furnishes and installs the POT frame, the DS1 Interconnection Arrangement and/or the DS3 Interconnection Arrangement and the Point of Termination Power Arrangement.
- SWBT furnishes and installs the POT frame and the Point of Termination Power Arrangement, the interconnector furnishes the DSX-1 and/or DSX-3 cross-connect connectorized panels, and SWBT provides the DS1 and/or DS3 Transmission Arrangement.
- The interconnector furnishes and installs the POT frame, SWBT furnishes the DS1 and/or DS3 Interconnection Arrangement and the Point of Termination power arrangement.
- The interconnector furnishes the POT frame and the DSX-1 and/or DSX-3 cross-connect connectorized panels, and SWBT furnishes and installs the Point of Termination Power Arrangement, the DS1 and/or DS3 Transmission Arrangement.

3.A.3.19 Reviewing each of the tariff elements, if SWBT provides the POT frame, the material to be furnished and installed by SWBT is as follows:

- Equipment frame consisting of a 7-0 ft. unequal flange cable duct, welded bay framework with 2 inch mounting holes; 5 inch guard rail in front; 2 inch guard rail in rear; zone 4 anchor bolts; other cable management accessories; and frame grounding material.

NOTE: If the interconnector furnishes the POT frame, the above information must be incorporated as part of their framework.

- Power cable(s) to terminate 48V DC, 100 amps, from the POT frame to SWBT's DC power plant.
- A cable from the central office ground bar located on the same floor as the equipment, and terminated on an interconnector central office ground bus bar detail located on the cable rack above the interconnector's partitioned space or in close proximity to the interconnector partitioned spaces (to terminate the POT frame to the central office Ground Bar and ensure the central office ground window).
- One Power Fuse Panel equipped with two 50 amp load circuits and a DC current meter.

3.A.3.20 In addition to furnishing a POT frame, the interconnector can select tariff elements where SWBT will furnish and install a specified number of DS1 and/or DS3 Interconnection Arrangements.

NOTE: If SWBT furnishes the DSX-1 Interconnection Arrangement, connectorized stub cables will be furnished to connect the DSX-1 panel(s) to the interconnector's equipment. The DSX-1 connectorized cabling diagram is shown in Exhibit 3.A.3.20-1.

3.A.3.21 One DS1 arrangement will provide for 84 pre-wired, modular DS1 circuits. The interconnector will identify its one year forecast quantity of DS1 circuits it intends to establish in the "Technical Equipment Specifications" section on the "Physical Collocation Application" form.

3.A.3.22 One DS3 Arrangement will provide one DS3 circuit. The interconnector will identify its one year forecast quantity of DS3 circuits it intends to establish in the "Technical Equipment Specification" section of the "Physical Collocation Application" form. The quantity of circuits requested, will determine the number of modules and cables required per DSX-3 panel.

3.A.3.23 The interconnector can select SWBT to furnish and install the POT frame and the Point of Termination Power Arrangement but provide its own DSX-1 and/or DSX-3 cross-connect panels. The interconnector must select, in addition to the POT frame tariff element, the DS1 Transmission Arrangement and/or DS3 Transmission Arrangement tariff elements.

NOTE: To reduce installation time at the central office, SWBT's cabling from its DSX-1 frame to the POT frame will be ordered connectorized (therefore not intended to be wire-wrapped at the panels). The DSX-1 panel(s) assigned to SWBT in the POT frame must be provided with connectorized cables for all circuits (i.e., 84 circuit DSX-1 panel will contain six 28-pair connectorized cable appearances). In addition, to simplify and expedite service order activity, the interconnector must specify its use of 56 or 84 circuit panels, since cables will be ordered and installed for all 56/84 circuits contained in each panel. In this manner, SWBT will fully cable and dedicate an equivalent number of DSX-1 56/84 circuit panels at SWBT's frame. DSX-1 pin-out connection table and DSX-1 I/O Interconnection Arrangements are shown in Exhibits 3.A.3.23-1 and 3.A.3.32-2 respectively.

3.A.3.24 If the interconnector furnishes and installs the POT frame, but selects tariff elements where SWBT will provide DSX-1 and/or DSX-3 interconnection, SWBT will furnish and install the DS1/DS3 arrangement discussed in paragraphs 3.A.3.21 and 3.A.3.22. In addition, SWBT will also provide the Point of Termination Power Arrangement tariff element.

3.A.3.25 Upon request, SWBT will mail a copy of the "Physical Collocation Application" form to a potential interconnector (refer to Exhibit 3.A.3.2-1 for information content of the form).

3.A.3.26 An interconnector interested in collocating in a SWBT central office should complete the form (one form per central office), and provide all pertinent information discussed in the following paragraphs, and submit it with a check for "Engineering Design Charges" (one per request) to:

SWBT-ICSC
One Bell Plaza, Rm 2800
Dallas, Texas 75202

3.A.3.27 The interconnector completed form will contain information SWBT requires to design the space/cage and ensure proper "in-place" equipment and cabling to interface SWBT's facilities with those of the prospective interconnector.

3.A.3.28 The form also contains information (e.g., SWBT completion date, occupancy date, cable length, charges, etc.) the interconnector requires to accomplish physical collocation in SWBT's central offices.

3.A.3.29 Instructions on completing the seven page Physical Collocation Application Form and the information being requested on each page (with explanation), are as follows:

<u>NUMBER</u>	<u>INFORMATION</u>
1	Name of the Company requesting collocation in SWBT.
2	Address of the Company.
3	The person questions can be referred to concerning the application form, their telephone number and the FAX number SWBT completed information can be sent to.
4	The name of the individual that has read and understood the "Expanded Interconnection Technical Publication For Collocation" binder of guidelines document - could be same individual listed in 3.
5	The name of the specific SWBT central office the collocation inquiry is being submitted.
6	The address and town of the central office.
7	The eight digit "Common Language Location Identifier (CLLI) code as it appears in Southwestern Bell Telephone Company Tariff F.C.C. No.73.
8	The amount of collocation space requested in this application.
9	A three year forecast of maximum -48V load requirements the interconnector expects to need (SWBT requires this information to include it with its forecasted requirements for power and power plant sizing data).
10	The one year forecast of DS1 and/or DS3 circuit quantity the interconnector expects to establish in this central office (this information will be used by SWBT to size the DSX panels for both the POT frame and/or SWBT's DSX- frames, order and install the required number of connectorized shielded pair and/or coaxial cables, circuit modules, and other administrative/support material to satisfy the interconnectors requirements).
11	The interconnector selected tariff elements that identify the point of interface equipment SWBT will be responsible for providing and the equipment to be furnished and installed by the interconnector.
NOTE:	If the interconnector selects tariff elements where they furnish and install point of interface material (i.e., the POT frame and/or DSX-panels) and SWBT provides the cabling and power elements, the equipment to be furnished and installed by the interconnector must be "in-place" within their collocation space by the "equipment installed" date shown under number 20 of this "Physical Collocation Application Form". If the equipment to be furnished by the interconnector is not installed when SWBT has scheduled their installation activity, the proposed completion date may be in jeopardy.

- 12 The list and quantity of transmission equipment, by manufacturer, to be provided by the interconnector. This list will also contained Point of Interface equipment to be provided by the interconnector, if tariff elements reflect this option (e.g., the type and quantity of DSX-1 panels, the circuit capacity - 56 or 84, the DSX-3 panels, etc.)
- 13 SWBT may provide two separate points of entry to a central office only when SWBT has at least two entry points for its own cable. The entrance manhole will be designated by SWBT and provided to the interconnector after SWBT verifies that vacant access sleeves or riser ducts exist at the entrance manhole.
- 14 In order for SWBT to identify the entrance manhole(s) for the interconnector, the direction from where the cable is originating must be specified by the interconnector.
- 15 The number of cables and the outside diameter of the cables will be provided to SWBT since SWBT will be responsible for extending the cable from the entrance manhole through the designated path and into the partitioned space.
- NOTE:** To satisfy the fire resistance requirements necessary for material in a central office, the interconnector supplied dielectric fiber optic cable will be placed in innerducts within the metallic conduct in the central office. With the use of innerduct, the outside diameter of the fiber cable shall not exceed .75 inches (OD).
- 16 The interconnector will be given the length requirements for the unbroken dielectric cable they must furnish to extend from outside the entrance manhole through the designated path and into the partitioned space. The interconnector will designate the individual and telephone number they want SWBT to provide this cable information to.
- 17 The interconnector is responsible for providing to SWBT an individual's name (or organization title), their contact number and FAX number that is readily accessible 24 hours a day. The individual or organization identified will primarily be used for technical consultation between the two companies (e.g., testing, service restoration, etc.).
- 18 Following detailed analysis of the interconnector provided forecasts included on the "Physical Collocation Application" form, SWBT will identify the quantity of required Tariff Element materials (e.g., DSX panels, cage, conduit space, etc.) to satisfy the requirements of the interconnector. The monthly rate and nonrecurring charges will be developed from this information and furnished to the interconnector for their review and consideration to proceed with collocation in the central office.

- 19 SWBT will determine the time interval required to order all material from outside equipment vendors, have material shipped to the location and have it installed to satisfy the interconnector selected and forecasted tariff elements identified in item 18 above. The schedule will be predicated upon the receipt of the confirmation to proceed with collocation by the interconnector. Per the tariff, unless there are unusual circumstances, SWBT must notify the interconnector that the space is ready for occupancy within 150 days after the interconnector provides written acceptance of the SWBT quote.
- 20 The equipment installed date and SWBT completion date may be the same date if building alteration work for collocation has already (i.e., space/cage is available for installing the necessary POT frame material). If building work has not previously occurred in the central office (e.g., first interconnector request in the office), SWBT completion date will include building ready date and equipment ship and installation dates.
- 21 SWBT will provide the interconnector, as part of the "Confirmation For Collocation" portion of the "Physical Collocation Application" form, a copy of the central office floor plan layout showing their space/cage arrangement in the designated central office.
- 22 When SWBT has completed all installation work associated with the collocation request, the date the work was completed will be documented and furnished as part of the "Physical Collocation Work Completion" form.
- 23 The occupancy date identified by SWBT starts the 60 day clock for the interconnector to place transmission equipment in the partitioned space. Unless there are circumstances beyond its control and SWBT is formally notified of the circumstances, if the interconnector fails to place equipment in their space within the 60 day period, the partitioned space reverts to available space.
- 24 If there are any exceptions to construction work that SWBT believes the interconnector needs to be informed of, such exceptions will be documented on the completion form. Should the interconnector require more information about the listed exception(s), SWBT technical staff will be contacted to interface with the interconnector.

SECTION 3.B

VIRTUAL COLLOCATION
EQUIPMENT DESIGN

3.B VIRTUAL COLLOCATION EQUIPMENT DESIGN

3.B.1 OUTSIDE PLANT CONSIDERATIONS

3.B.1.1 The interconnection point designated by SWBT will be located within a separate handhole or cabinet. Such a cabinet or handhole will be positioned outside the entrance manhole or at another mutually accessible location. The interconnector and SWBT will have unrestricted access to the "meet point" with reasonable notification expected.

3.B.2 EQUIPMENT ENGINEERING

3.B.2.1 If physical collocation space in a designated central office is exhausted or does not exist, SWBT may file petitions for exemption from the general requirement to make physical collocation available to all interconnectors desiring it in that specific central office. Provided equipment lineup space exists in the central office, the interconnector will be offered virtual collocation.

3.B.2.2 If virtual collocation is implemented in a given SWBT central office, SWBT will interface with the interconnector's technical staff (point of contact will be provided to SWBT) and obtain the quantity and manufacturer of the equipment the interconnector wants SWBT to order and install in that central office.

3.B.2.3 The equipment will be installed in SWBT's regular bay lineups, where SWBT has similar equipment installed. One bay will house only one interconnector equipment and will be stenciled as such.

SECTION 3.C
POWER AND GROUNDING

3.C POWER AND GROUNDING

3.C.1 PHYSICAL COLLOCATION

3.C.1.1 Powering and grounding arrangements for collocated equipment will be such as to minimize any impact on the reliability of SWBT's own telecommunication equipment as well as that of the interconnector.

3.C.1.2 SWBT will utilize existing power and grounding systems and follow its present power and grounding procedures and practices. Interconnectors may not provide any power equipment of their own.

3.C.1.3 Interconnectors will provide a minimum of three (3) years forecasting of power drain requirements for their equipment, submitted on the Physical Collocation Application Form. SWBT provides AC and DC power to the partitioned space. Interconnectors will receive the same -48V battery backed DC power and nonessential AC power that SWBT provides for itself.

3.C.1.4 Typical power requirements provided by SWBT to an interconnector are as follows:

- two nonessential 120V, 15 ampere AC circuits
- two DC circuits, nominal -48V, 2-50 ampere loads.

AC POWERING OF EQUIPMENT

3.C.1.5 AC power for convenience outlets will be provided from a commercial (nonessential) source by separate circuits from those serving SWBT telecommunication equipment. All nonessential AC requirements, including the convenience outlets, lighting, switches, etc., will be provided by SWBT, as outlined in Section 6, at the time of the partitioned space construction.

3.C.1.6 Essential AC power, if requested, will be handled on an Individual Case Basis (ICB). Essential AC power for SWBT and interconnector equipment will not share a common distribution path, and coordination of over-current protection devices will be observed. Essential AC power will be provided by SWBT.

DC POWERING OF EQUIPMENT

3.C.1.7 The SWBT DC power network will be directly shared between SWBT and the interconnector. An interconnector's equipment will be capable of operating in the power systems environment described in the following:

- TR-NWT-000513, Power
- TR-NWT-001089, Electromagnetic Compatibility and Electrical Safety Generic Criteria for Network Telecommunication Equipment
- FR-NWT-000064, LSSGR, modules 13 and 15.

NOTE: These documents cover the design and electrical requirements for the interconnector's equipment to be compatible with the SWBT network.

3.C.1.8 DC distribution circuits to the interconnector's equipment will follow the SWBT approved power systems policies and practices.

3.C.1.9 SWBT will provide two (2) separate nominal negative (-) 48V DC distribution circuits. Preliminary information indicates that an interconnector will require an approximate DC load of 20 to 50 amperes per load. To meet these needs, DC power to the interconnector will be as follows:

- A. The primary distribution circuits will originate at a BDFB or a power plant and terminate at a secondary distribution point. The first choice is to provide the primary distribution circuits from a BDFB (equipped with a minimum of two (2) separate loads) or DC power plant powering integrated ground plane loads. If these type power sources are not available, distribution circuit will come from the power plant powering the switch. Normally this would be a shared power plant powering isolated and non-isolated ground plane loads. Protective devices will be sized for the maximum load. If the BDFB is the primary distribution source, a 60 amp fuse is sufficient to protect a 50 amp load. The secondary distribution panel will be engineered for a maximum of two (2) fifty (50) amp circuits.**

DC distribution circuits to interconnector equipment powered from a DC plant powering isolated ground plane loads must be run by the ground window to ensure that transient currents resulting from faults do not cause misoperation of SWBT or interconnector equipment.

- B. The primary battery and battery return distribution circuits will terminate in a secondary distribution fuse panel (see Exhibit 3.C.1.9-1) located in a Point of Termination (POT) frame. Panel will be equipped with eight (8) two-hole lug compression connectors (two for each battery and ground input and output loads). Each connector will accept a No. 6 AWG wire. The panel will be equipped with two fuse blocks in the 31-60 ampere range, shunts, volt and amp meter, alarm relay, and a small block of six (6) GMT fuses for -48v power to LED circuits located in the jack panels. SWBT will reserve one (1) of the six GMT fuses to power miscellaneous fuse panel in supplemental POT frame.**

The POT frame will be provided by SWBT as part of a standard collocation package. The secondary distribution fuse panel will be part of that package.

There may be cases when the interconnector provides its own POT frame. As outlined in Section 3.A.3, Equipment Engineering, the interconnector will use a SWBT provided power arrangement (see Exhibit 3.A.3.6-1). SWBT will provide the secondary distribution fuse panel. Panel can be mounted on the POT frame by the interconnector or SWBT. The POT frame design furnished by SWBT or the interconnector is a standard configuration as outlined in Section 3.A.3.

- C. The interconnector will be charged a flat monthly tariffed rate for DC and AC power.**

GROUNDING

3.C.1.10 General grounding will follow TR-NWT-000295 and the Installation Guide TP76300. Extend a grounding conductor from the central office ground bar located on the same floor as the equipment, and terminate on an interconnector central office ground bus bar detail located on the cable rack above the interconnector partitioned space or in close proximity to the interconnector partitioned space. This bus bar can be used as a terminating point for all grounding conductors of the equipment that is located in the collocation area and the partitioned space itself.

3.C.1.11 SWBT will be responsible for providing and terminating the extended central office ground circuit (see Exhibit 3.C.1.11-1) as follows:

- A.** Provide and mount the interconnector central office ground bar for the extended central office ground circuit.
- B.** Provide a cable from the central office ground bar to the interconnector central office ground bar, including means of support.
- C.** Provide cables and termination hardware from the interconnector central office ground bar to the POT frames and partitioned spaces.
- D.** Connect the POT frames to the central office ground cable. (A No. 6 AWG and connector is provided on the frame.)
- E.** Interconnector will be responsible for extending the central office ground circuit to their equipment by tapping into the extended central office ground cable above the partitioned spaces with a No. 6 AWG.
- F.** In cases where there may be only one interconnector, extend the central office ground circuit with a No. 2 AWG from the central office ground bar directly to the POT frame and terminate as shown in Exhibit 3.C.1.11-1.

3.C.1.12 SWBT will provide, erect and connect the cages. The cage will be installed in sections. To provide a continuous ground, each section will be connected together by a No. 6 ground wire.

3.C.1.13 When engineering the extension of the SWBT central office ground, the following items will be addressed:

- A.** Distance between the equipment from the central office ground bar.
- B.** The largest fuse for which the extended central office ground cable will be used as a fault clearing path.
- C.** If the cage is metallic, it must be grounded.
- D.** Is the interconnector equipment design such that the framework serves as battery return?
- E.** If the return bar in the power plant serves as the Ground Window, note where the power feeds extended to the interconnector equipment are terminated.
- F.** If the interconnector requires an isolated ground plane, the requirements of TR-NWT-000295 must be met.

3.C.2 VIRTUAL COLLOCATION

3.C.2.1 Information regarding virtual collocation is under development and will be included at a later date.

SECTION 3.D

EXHIBITS

PHYSICAL COLLOCATION APPLICATION FORM

GENERAL INFORMATION

INTERCONNECTOR INFORMATION

1. INTERCONNECTOR _____ (1)
2. ADDRESS _____ (2)
3. CONTACT _____ (3) TEL# _____
(Name) FAX# _____

I HAVE READ AND UNDERSTAND SWBT'S COLLOCATION TECHNICAL STANDARDS

(4) _____ / _____ / _____
Name-Type or Print Signature Date

DESIRED COLLOCATION SITE

1. CENTRAL OFFICE _____ (5)
2. ADDRESS _____ (6) CLI _____ (7)
3. TOWN _____

FOR SWBT REFERENCE

DATE RECEIVED _____

ICSC

NAME _____ ADDRESS _____
TEL# _____ FAX# _____
CASE# _____ CLI _____

ASSIGNED SWBT INTERCONNECTION COORDINATOR

NAME _____ TEL# _____
ADDRESS _____ STATE _____ FAX# _____
DATE FAX SENT TO SWBT INTERCONNECTION COORDINATOR ____ / ____ / ____

PHYSICAL COLLOCATION APPLICATION FORM

INTERCONNECTOR _____ ADDRESS _____

CENTRAL OFFICE _____ CITY _____ STATE _____

SWBT INTERCONN COORD _____ TEL# _____

SPECIFIC FLOOR SPACE REQUIREMENTS

1. NUMBER OF EQUIPMENT FRAMES TO BE INSTALLED _____
2. AMOUNT OF SPACE REQUESTED ☐ 100 SQ. FT. MIN ☐ 200 SQ. FT. ☒ 8
 ☐ 300 SQ. FT. ☐ 400 SQ. FT.
3. ATTACHED FLOOR PLAN LAYOUT FOR SPACE, INCLUDE 7'-0" x 23' POT FRAME IN LAYOUT (FOOTPRINT)
4. ANY SPECIAL REQUIREMENTS, PLEASE DOCUMENT _____

TECHNICAL EQUIPMENT SPECIFICATIONS

1. SPECIFY DC POWER REQUIREMENTS (NOT TO EXCEED 100 AMPS)
-48V BATTERY & GROUND: AMPS REQUIRED LOAD A _____ LOAD B _____
THREE YEAR FORECAST OF MAX. LOAD REQ. LOAD A _____ LOAD B _____ ☒ 9
2. SPECIFIC AC POWER REQUIREMENTS (NOT TO EXCEED 110 VOLTS)
_____ VOLTS/UNPROTECTED _____ REQD AMPS _____ # OF CKTS
3. TYPES OF SERVICE (ONE YEAR FORECAST): DS1 _____ QTY DS3 _____ QTY ☒ 10
4. SYNCHRONIZATION REQUIRED YES ☐ NO ☐
5. INTERCONNECTOR SELECTED TARIFF ELEMENTS:
☐ SWBT FURNISHES/INSTALLS POT FRAME AND DS1/DS3 INTERCONNECTION ARRANGEMENT
☒ 11 ☐ SWBT FURNISHES/INSTALLS POT FRAME AND DS1/DS3 TRANSMISSION ARRANGEMENT
☐ INTERCONN FURNISHES/INSTALLS POT FRAME AND SWBT FURNISHES DS1/DS3 INTERCONNECTION AND POT PWR ARRANGEMENTS
☐ INTERCONN FURNISHES/INSTALLS POT FRAME AND DSX-1/DSX-3-CONN CONNECTORIZED PANELS, SWBT PROVIDES POT PWR AND DS1/3 TRANSMISSION ARRANGEMENTS

EXHIBIT 3.A.3.2-1

PHYSICAL COLLOCATION APPLICATION FORM

INSURANCE AND TECHNICAL INFORMATION

INTERCONNECTOR _____ ADDRESS _____
CENTRAL OFFICE _____ CITY _____ STATE _____
SWBT INTERCONN COORD _____ TEL# _____
FAX# _____

INSURANCE INFORMATION

ATTACHED ARE THE CERTIFICATES OF INSURANCE AND COPIES OF POLICIES REFLECTING THE COVERAGE DELINEATED IN SWBT'S TARIFF.

DETAILED TECHNICAL INFORMATION

THE FOLLOWING IS A LIST OF THE SPECIFIED TRANSMISSION EQUIPMENT PLANNED TO BE PLACED IN THE

CENTRAL OFFICE ON OR ABOUT ____/____/____ WITH REQUESTED PARTITION SPACE READINESS DATE
OF ____/____/____

GENERIC NAME

QUANTITY

12

PHYSICAL COLLOCATION APPLICATION FORM

OUTSIDE PLANT FIELD SURVEY

INTERCONNECTOR _____ ADDRESS _____
CENTRAL OFFICE _____ CITY _____ STATE _____
SWBT INTERCONN COORD _____ TEL# _____
FAX# _____

OSP CABLE INFORMATION

1. CABLE TO BE PLACED IN ENTRANCE MANHOLE 13 _____

2. DIRECTION FROM WHERE CABLE IS ORIGINATING? (BE SPECIFIC) 14 _____

3. IS ROUTE DIVERSITY REQUESTED? YES [] NO []

CABLE SECTION INFORMATION

1. NUMBER OF CABLES TO BE PLACED _____ SIZE OF CABLE (DIA) 15 _____

2. TYPE OF CABLE (MANUFACTURER'S NAME) _____

NOTE: SWBT OSP ENGINEERING WILL PROVIDE THE INTERCONNECTOR CONTACT WITH THE TOTAL LENGTH OF UNBROKEN DIELECTRIC CABLE TO EXTEND FROM OUTSIDE THE ENTRANCE MANHOLE THROUGH THE COLLOCATOR SPACE. THE INTERCONNECTOR WILL LEAVE SUFFICIENT CABLE LENGTH OUTSIDE THE ENTRANCE MANHOLE TO ALLOW SWBT TO FULLY EXTEND THE CABLE FROM OUTSIDE THE ENTRANCE MANHOLE, INTO AND THROUGH THAT MANHOLE, INTO AND THROUGH THE VAULT AND INTO THE PARTITIONED SPACE. EXCESS CABLE WILL BE BROUGHT INTO THE PARTITIONED SPACE AND LEFT AS SLACK FOR THE INTERCONNECTOR TO INSTALL TO THEIR EQUIPMENT.

3. INTERCONNECTOR CONTACT FOR REFERRING CABLE LENGTH INFORMATION

NAME 16 _____ TEL# _____

FOR SWBT REFERENCE

#FT OF CABLE REQ _____ FT DATE INFOR PROVIDED CONTACT ____/____/____

NAME _____ DATE ____/____/____

PHYSICAL COLLOCATION APPLICATION FORM

CONFIRMATION FOR COLLOCATION

1. INTERCONNECTOR _____
2. ADDRESS _____
3. CONTACT 17 _____ TEL# _____
(Name) _____ FAX# _____
4. CLASS OF SERVICE XPQ
5. CENTRAL OFFICE _____
6. ADDRESS _____ CLI _____
7. INTERCONN BILLING ACCOUNT NUMBER _____

18	<u>USOC</u>	<u>QTY</u>	<u>MONTHLY RATE</u>	<u>NONRECURRING CHARGE</u>
CAGE, PER 100 SQ. FT. NO. OF SQ. FT.	NRBCF	_____	N/A	_____
HOUSE ELECTRIC, PER CAGE	NRBCG	_____	N/A	_____
FLOOR SPACE, PER 100 SQ. FT.	SP1ST	_____	_____	N/A
SECURITY ESCORT, PER HALF HOUR	SP1SG	_____	N/A	_____
POINT OF TERMINATION FRAME, EACH	SP1FT	_____	_____	_____
DS1 INTERCONNECTION ARRANGEMENT, EACH	BXCDX	_____	_____	_____
DS3 INTERCONNECTION ARRANGEMENT, EACH	BXCEX	_____	_____	_____
POINT OF TERMINATION POWER ARRANGEMENT EA.	SP1PE	_____	_____	_____
DS1 TRANSMISSION ARRANGEMENT, EACH	CXCDX	_____	_____	_____

	<u>USQC</u>	<u>QTY</u>	<u>MONTHLY RATE</u>	<u>NONRECURRING CHARGE</u>
DS3 TRANSMISSION ARRANGEMENT, EACH	CXCEX	_____	_____	_____
CONDUIT SPACE, PER FT.	SP1CA	_____	_____	_____
CABLE PULL, PER 1/2 HOUR	NRBCJ	_____	N/A	_____
DC TRANSMISSION POWER	SP1PB	_____	_____	N/A
ENGINEERING DESIGN CHARGE	NRBCE	_____	N/A	_____
TENANT ACCOMMODATION CHARGE	NRBCM	_____	N/A	_____

IF SWBT DOES NOT PROVIDE POT FRAME AND/OR DSX1/DSX3 X-CONN PANELS INTERCONNECTOR MUST HAVE THIS EQUIPMENT INSTALLED IN THE CENTRAL OFFICE BY THE DATE IDENTIFIED BELOW OR JEOPARDIZE THE SWBT COMPLETION DATE.

EQUIPMENT INSTALLED 19 DAYS AFTER RECEIPT OF CONFIRMATION

SWBT COMPL 20 DAYS AFTER RECEIPT OF CONFIRMATION

Attached is the design for the space/cage where the Interconnector will be located in the 21 central office.

DATE NSS FORWARDED FORM TO INTERCONN COORD DATE ____/____/____

THIS FORM ALONG WITH A CHECK FOR 50% OF ALL CHARGES SHOULD BE FORWARDED TO THE FOLLOWING SOUTHWESTERN BELL ICSC DEPARTMENT:

- Name

Street

City State Zip Code

SWBT ACCOUNT MGR _____ TEL# _____

Signature DATE ____/____/____

PHYSICAL COLLOCATION WORK COMPLETION FORM

INTERCONNECTOR _____ ADDRESS _____

CENTRAL OFFICE _____ CITY _____ STATE _____

SWBT INTERCONN COORD _____ TEL# _____

FAX# _____

CASE # _____ CLI _____

SWBT COMPLN DATE (22) / ____ / ____ OCCUPANCY DATE (23) / ____ / ____

SWBT PORTION OF THIS COLLOCATION PROJECT HAS BEEN COMPLETED IN ACCORDANCE WITH SWBT TARIFF FCC NO. 73, AND THE COLLOCATION SPECIFICATIONS APPROVED FOR THIS JOB. THE SPACE IS NOW READY FOR OCCUPANCY. ALL ASSOCIATED WORK IS COMPLETE.

EXCEPTIONS TO CONSTRUCTION WORK: (24) _____

THE NON-RECURRING CHARGE AND MONTHLY RATES, AS DELINEATED IN THE TARIFF, COMMENCE UPON COMPLETION DATE SHOWN ABOVE.

SOUTHWESTERN BELL TEL. CO.
(NETWORK SALES SUPPORT)

Name - Type or Print

Signature Date

DATE NSS FORWARDED COMPLETION FORM TO SWBT INTERCONN COORDINATOR AND THE ICSC.

NAME _____ DATE ____ / ____ / ____

EXHIBIT 3.A.3.5-1
Standard Collocation Configuration

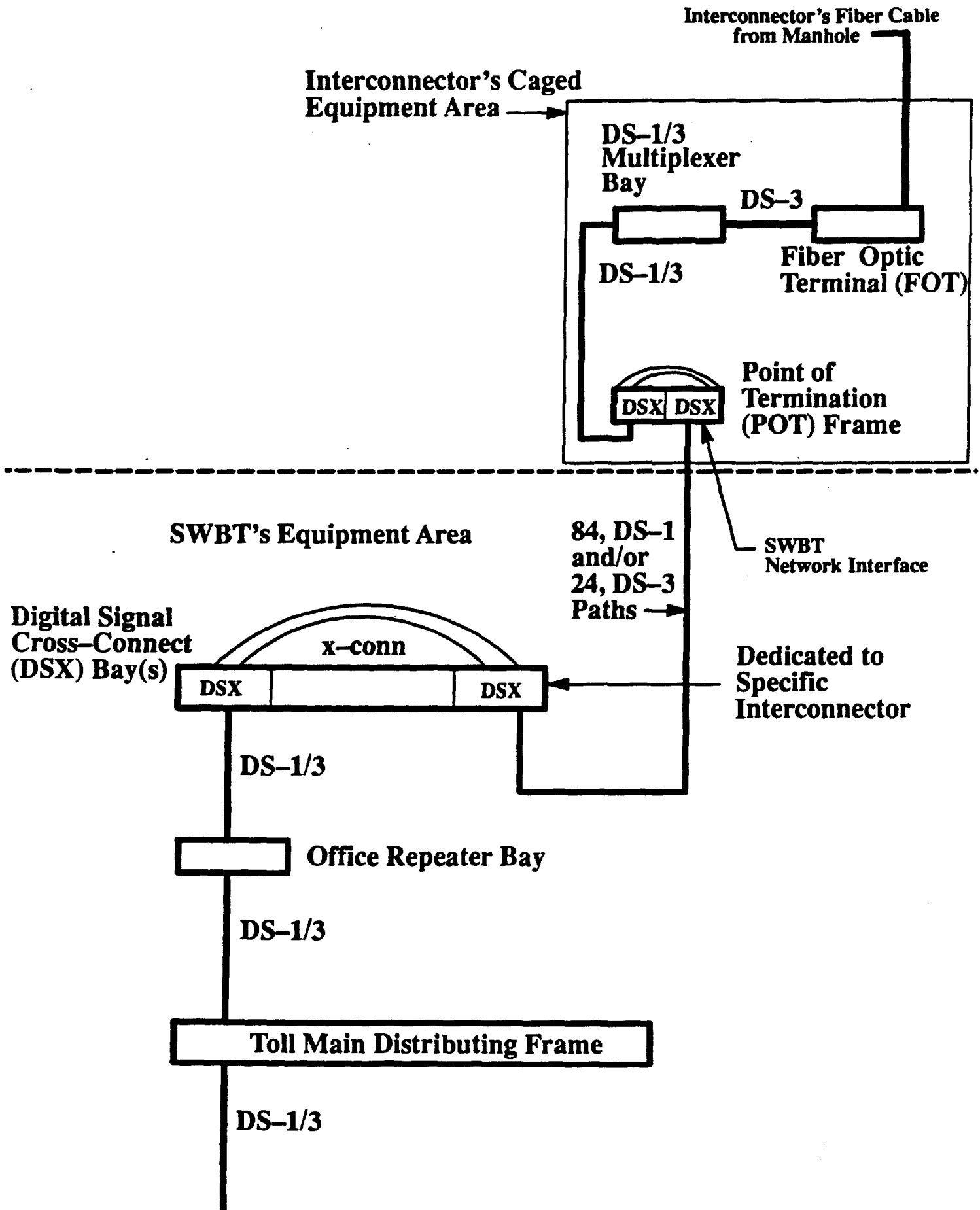
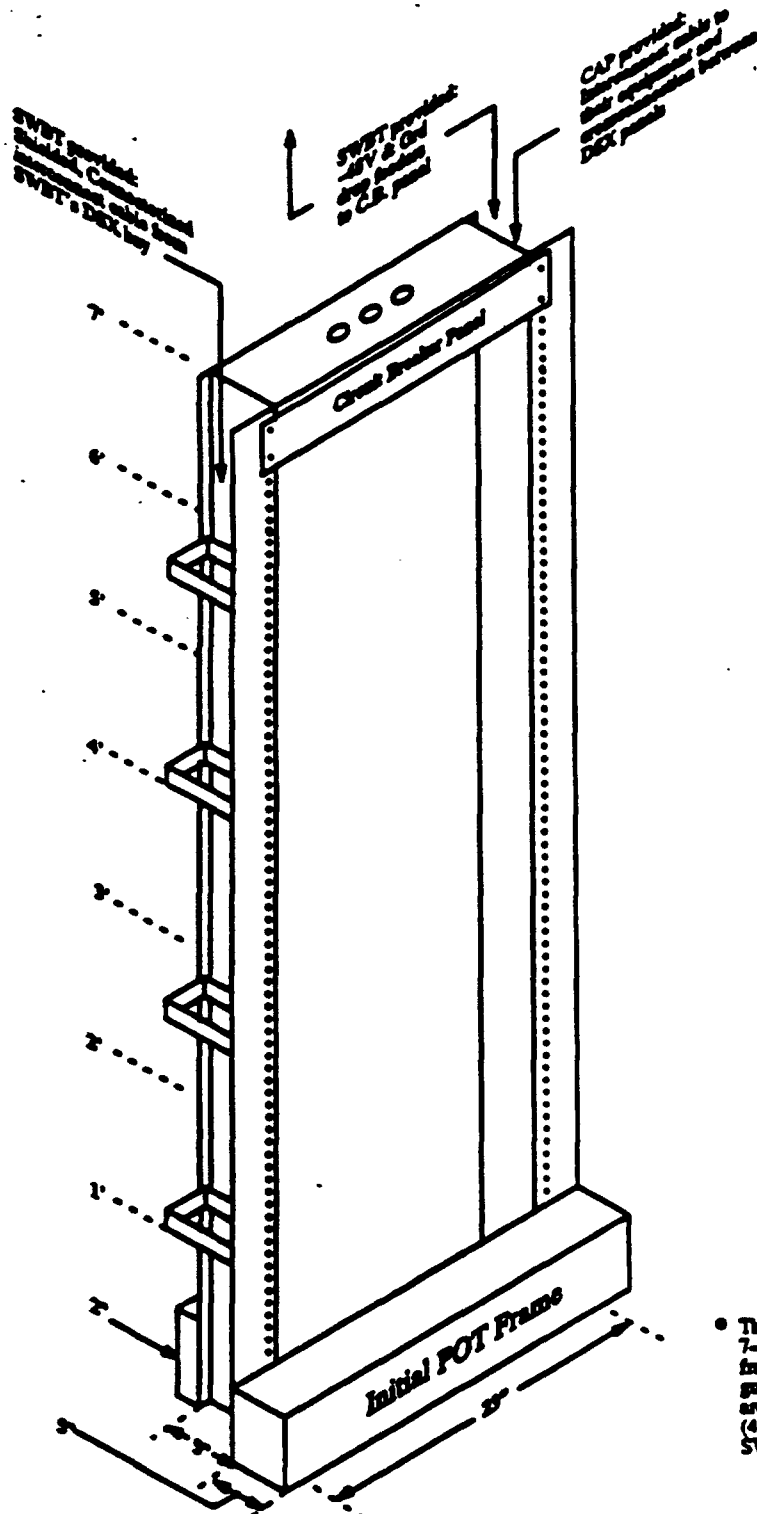


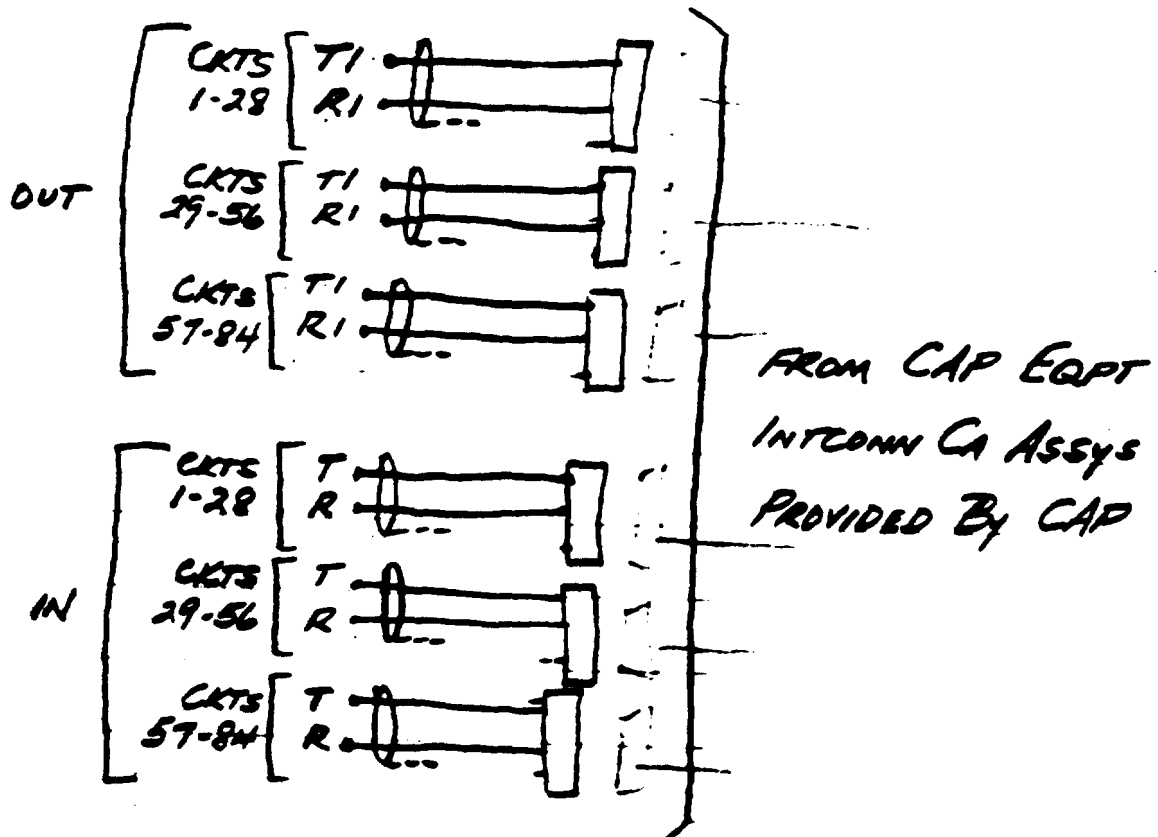
EXHIBIT 3.A.3.6-1 POT FRAME CONFIGURATION



- The basic bay structure should consist of:
7-0 x 23" unequal flange, cable duct, welded bay framework with 2" mounting holes (WECO std); guard rails in front and rear (rails depicted in diagram are for illustration purposes only); some 3 floor bolts; (4) vertical cable trays on SWBT side of frame; and SWBT approved frame grounding material.

EXHIBIT 3.A.3.20-1

SWBT PROVIDED
POINT OF TERMINATION BAY
DSX-1 CROSS-CONNECT PANEL
INTERCONNECTION TO CAP EQUIPMENT



POT FRAME DSX-1
INTERCONNECTION TO CAP EQUIPMENT